ABSTRACT OF THE INVENTION

Data packets of a subscriber are addressed for transmission from an originating device through an IP network to a destination network. A DHCP request, associated with a first subscriber IP address from the IP network, is received from the originating device and routed through the IP network to a destination device in the destination network using an IP network address of the destination device. The destination device forwards the DHCP request to a DHCP server. A DHCP response is received from the DHCP server, through the destination device, including a second subscriber IP address associated with the destination network. The DHCP response is sent through the IP network to the originating device using the first subscriber IP address. The originating device obtains the second subscriber IP address from the DHCP response and addresses data packets using the first and second subscriber IP addresses.